

Amendments to the Claims

1-66. (Cancelled)

67. (New) An exercise machine comprising:

 a frame;

 a resistance object;

 a first arm moveably attached to said frame at a first pivot point such that said first arm traverses a fixed path about a first axis permitted by said first pivot point, said first arm also being connected to said resistance object;

 a second arm moveably attached to said frame at a second pivot point such that said second arm traverses a fixed path about a second axis permitted by said second pivot point, said first axis and said second axis lying in the same plane, said second arm also being connected to said resistance object; and

 at least two handle locations on each of said arms, a first location of said at least two handle locations on each of said arms being forward of said plane, a second location of said at least two handle locations on each of said arms being behind said plane; wherein said first axis and said second axis are not parallel to each other;

 a bench having a seat portion attached to said frame forward of said plane;

 wherein a user on said seat portion and facing forward on said machine can manipulate a handle at said first location on each of said arms to perform a push-type exercise resisted by said resistance object; and

 wherein said user on said seat portion and facing backward on said machine can manipulate a handle at said second location on each of said arms to perform a pull-type exercise resisted by said resistance object.

68. (New) The exercise machine of claim 67 wherein the plane of motion of the said at least two handle locations is generally perpendicular to the said plane.

69. (New) The exercise machine of claim 68 wherein said first arm and said second arm rotate relative to said frame.

70. (New) The exercise machine of claim 69 wherein:

 said handle at said first location traverses a guided path to perform said push-type exercise; and

 said handle at said second location traverses a different guided path to perform said pull-type exercise.

71. (New) The exercise machine of claim 70 wherein:

 said handle at said first location traverses a fixed path to perform said push-type exercise; and

 said handle at said second location traverses a different fixed path to perform said pull-type exercise.

72. (New) The exercise machine of claim 70 wherein said push-type exercise comprises a converging exercise.

73. (New) The exercise machine of claim 72 wherein said pull-type exercise comprises a diverging exercise.

74. (New) The exercise machine of claim 73 wherein said pull-type exercise comprises a rowing exercise.

75. (New) The exercise machine of claim 74 wherein said push-type exercise comprises a chest exercise.

76. (New) The exercise machine of claim 74 wherein said resistance object resists said push-type exercise in the same direction as said resistance object resists said pull-type exercise.

77. (New) The exercise machine of claim 76 wherein said first arm and said second arm each move independently of the other.

78. (New) The exercise machine of claim 77 wherein said handle at said first handle location and said handle at said second handle location on each of said arms comprise the same handle moved between the two locations.

79. (New) The exercise machine of claim 77 wherein said handle at said first handle location and said handle at said second handle location on each of said arms comprise different handles.

80. (New) The exercise machine of claim 79 wherein the movement of said handle at said second handle location causes movement of said handle at said first handle location on each of said arms.

81. (New) The exercise machine of claim 67 wherein said push-type exercise comprises a converging exercise and said pull-type exercise comprises a diverging exercise.

82. (New) The exercise machine of claim 67 wherein said handle at said first handle location and said handle at said second handle location on each of said arms comprise the same handle moved between the two locations.

83. (New) The machine of claim 82 wherein said push-type exercise comprises a converging exercise and said pull-type exercise comprises a diverging exercise.

84. (New) The exercise machine of claim 67 wherein said handle at said first handle location and said handle at said second handle location on each of said arms comprise different handles.

85. (New) The exercise machine of claim 84 wherein the movement of said handle at said second handle location causes movement of said handle at said first handle location on each of said arms.

86. (New) The exercise machine of claim 67 wherein said first arm and said second arm each move independently of the other.

87. (New) The exercise machine of claim 67 wherein said first arm and said second arm move dependently.

88. (New) The exercise machine of claim 67 wherein said first arm and said second arm each move rotationally.

89. (New) The machine of claim 67 wherein said push-type exercise comprises a converging exercise and said pull-type exercise comprises a diverging exercise.

90. (New) The exercise machine of claim 67 wherein said seat portion is in generally the same horizontal position when said user faces forward as when said user faces backward.

91. (Currently Amended) An exercise machine comprising:

a frame;

a resistance object;

a first arm moveably attached to said frame such that said first arm traverses a fixed path about a first axis permitted by a first pivot point at which said first arm is connected to said frame;

a second arm moveably attached to said frame such that said second arm traverses a fixed path about a second axis permitted by a second pivot point at which said second arm is connected to said frame, said first axis and said second axis being in the same plane;

at least two handle locations on each of said arms, a first location of said at least two handle locations on each of said arms being forward of said plane, a second location of said at least two handle locations on each of said arms being behind said plane;

a bench having a seat portion attached to said frame forward of said plane;

wherein said first axis and said second axis are not parallel to each other;

wherein a handle at said first handle location on each of said arms traces a first arc when pushed;

wherein a handle at a second handle location on each of said arms traces a second arc when pulled;

wherein said handle at said first handle location on each of said arms and said handle at said second handle location on each of said arms each obtain resistance from said resistance object in the same direction;

wherein a user faces forward while seated on said seat portion to push said handle in said first handle location; and

wherein a user faces backward while seated on said seat portion to pull said handle in said second handle location.

92. (New) The exercise machine of claim 91 wherein said handle at said first location and said handle at said second location comprise the same handle moved between the two locations.

93. (New) The exercise machine of claim 91 wherein said handle at said first location and said handle at said second location comprise different handles.

94. (New) The exercise machine of claim 91 wherein said seat portion is in generally the same horizontal position when said user faces forward as when said user faces backward.

95. (New) An exercise machine comprising:

a frame;

a resistance object;

a first arm rotatably attached to said frame such that said first arm only rotates relative to said frame about a first axis permitted by a first pivot point;

a second arm rotatably attached to said frame such that said second arm only rotates relative to said frame about a second axis permitted by a second pivot point, said first axis and said second axis being in the same plane;

a first set of at least two handles located forward of said plane, a first handle of said first set attached to said first arm and a second handle of said first set attached to said second arm; and

a second set of at least two handles located behind said plane, a first handle of said second set attached to said first arm and a second handle of said second set attached to said second arm;

a bench having a seat portion attached to said frame forward of said plane;

wherein said first axis and said second axis are not parallel to each other;

wherein a user faces forward on said seat portion and manipulates said first set of handles to perform a pushing, converging exercise along a fixed path; and

wherein said user faces backward on said seat portion and manipulates said second set of handles to perform a pulling, diverging exercise along a different fixed path.

96. (New) The machine of claim 95 wherein said resistance object comprises an inertial resistance object.

97. (New) The machine of claim 96 wherein said inertial resistance object comprises a weight.

98. (New) The exercise machine of claim 95 wherein said seat portion is in generally the same horizontal position when said user faces forward as when said user faces backward.

99. (New) An exercise machine comprising:

 a frame;

 a resistance object;

 a first arm moveably attached to said frame at a first pivot point such that said first arm traverses a fixed path about a first axis permitted by said first pivot point, said first arm also being connected to said resistance object;

 a second arm moveably attached to said frame at a second pivot point, said first pivot point and said second pivot point lying in a generally vertical plane, such that said second arm traverses a fixed path about a second axis permitted by said second pivot point, said second arm also being connected to said resistance object; and

 at least two handle locations on each of said arms, a first location of said at least two handle locations on each of said arms being forward of said generally vertical plane, a second location of said at least two handle locations on each of said arms being behind said generally vertical plane;

 wherein said first axis and said second axis are not parallel to each other;

 a bench having a seat portion attached to said frame forward of said generally vertical plane;

 wherein a user on said seat portion and facing forward on said machine can manipulate a handle at said first location on each of said arms to perform a push-type exercise resisted by said resistance object; and

wherein said user on said seat portion and facing backward on said machine can manipulate a handle at said second location on each of said arms to perform a pull-type exercise resisted by said resistance object.

100. (New) The exercise machine of claim 99 wherein the plane of motion of the said at least two handle locations is generally perpendicular to the said generally vertical plane.

101. (New) The exercise machine of claim 100 wherein said first arm and said second arm rotate relative to said frame.

102. (New) The exercise machine of claim 101 wherein:

 said handle at said first location traverses a fixed path to perform said push-type exercise;
and

 said handle at said second location traverses a different fixed path to perform said pull-type exercise.

103. (New) The exercise machine of claim 102 wherein said push-type exercise comprises a converging exercise and said pull-type exercise comprises a diverging exercise.

104. (New) The exercise machine of claim 103 wherein said pull-type exercise comprises a rowing exercise.

105. (New) The exercise machine of claim 104 wherein said push type exercise comprises a chest exercise.

106. (New) The exercise machine of claim 104 wherein said resistance object resists said push-type exercise in the same direction as said resistance object resists said pull-type exercise.

107. (New) The exercise machine of claim 106 wherein said first arm and said second arm each move independently of the other.

108. (New) The exercise machine of claim 107 wherein said handle at said first handle location and said handle at said second handle location on each of said arms comprise the same handle moved between the two locations.

109. (New) The exercise machine of claim 107 wherein said handle at said first handle location and said handle at said second handle location on each of said arms comprise different handles.

110. (New) The exercise machine of claim 109 wherein the movement of said handle at said second handle location causes movement of said handle at said first handle location on each of said arms.

111. (New) The exercise machine of claim 99 wherein said push-type exercise comprises a converging exercise and said pull-type exercise comprises a diverging exercise.

112. (New) The exercise machine of claim 99 wherein said handle at said first handle location and said handle at said second handle location on each of said arms comprise the same handle moved between the two locations.

113. (New) The machine of claim 112 wherein said push-type exercise comprises a converging exercise and said pull-type exercise comprises a diverging exercise.

114. (New) The exercise machine of claim 99 wherein said handle at said first handle location and said handle at said second handle location on each of said arms comprise different handles.

115. (New) The exercise machine of claim 114 wherein the movement of said handle at said second handle location causes movement of said handle at said first handle location on each of said arms.

116. (New) The exercise machine of claim 99 wherein said first arm and said second arm each move independently of the other.

117. (New) The exercise machine of claim 99 wherein said first arm and said second arm move dependently.

118. (New) The exercise machine of claim 99 wherein said first arm and said second arm each move rotationally.

119. (New) The machine of claim 99 wherein said push-type exercise comprises a converging exercise and said pull-type exercise comprises a diverging exercise.

120. (New) The exercise machine of claim 99 wherein said seat portion is in generally the same horizontal position when said user faces forward as when said user faces backward.